



March 15, 2007

Market Advisory Committee Members
California EPA
1001 I Street
Sacramento, CA 95814

Re: Comments to the Market Advisory Committee

As the Market Advisory Committee works to form recommendations regarding a future carbon trading market as part of implementing AB 32, APX Inc., a California-based company, would like to provide the following comments and thoughts.

APX is the nation's leading infrastructure provider for U.S. environmental markets in renewable energy and power generation information management, including emissions tracking. Our technology is the backbone for every major renewable energy market in North America, including the PJM (GATS), ISO New England (NEPOOL GIS), WECC (WREGIS), ERCOT (Texas REC) and most recently the Upper Midwest (MRETS) markets. In total, more than 2 Billion Renewable Energy Certificates have been created and are under management using this infrastructure.

In addition to registering and tracking renewable energy, in some of these markets APX technology is used to track all power generation (above and beyond renewable energy) and all fuel types, including power imports and exports across states and regions. In some states and regions, such as the Mid-Atlantic (PJM GATS) and Northeast (NEPOOL GIS) the same infrastructure is also used to track greenhouse gases, including carbon dioxide, methane, volatile organics, particulates, and other emissions.

The ability to track the relationship between power generation and related emissions is a significant issue in California and equally important in other states, especially for states where a large portion of the electricity is imported from surrounding states. As California and other western states deploy the Western Renewable Energy Generation Information System (WREGIS) in 2007 to manage state Renewable Portfolio Standards, the State will have at its disposal a rich toolkit for managing environmental market systems for not only renewable energy, but also greenhouse gases and energy efficiency. We urge the Committee to explore how other states and regions have chosen to deploy the necessary infrastructure for their environmental markets, because we believe that some of the approaches of other states are applicable in California as well.

Key lessons from our experience in implementing successful market based systems include:

- **Importance of a Transparent, Trusted Robust Infrastructure**
 - Important to have a full audit trail and transaction history for all transactions.
 - Full visibility for regulators and market participants.
 - Must be scalable and capable of handling very large volumes of data with security and geographic redundancy.
 - Must support 24/7 access to the market infrastructure, with phone support, as needed.
 - Needs to be able to handle complex multi-tiered rules and regulations.
- **Certainty of Market Rules, with Fairness and Access for all Market Participants**
 - Web-based deployment gives everyone the same low cost access to the necessary market technology.
 - Represents a full and clear implementation of the rules according the proscribed guidelines for access and use of the system.
 - Implements a clear workflow process, so that all Market Participants know what they have to do.
- **Lessons Can Be Learned from Other US Environmental Market Systems**
 - Deployments of market based approaches to environmental management have been proven to be successful in the US.
 - There is existing, proven technology available today. It is not new; rather it is well tested and mature.
 - Such technology has been implemented on a large scale, with hundreds of millions of transactions and participants at a state and regional level.
- **California has an Existing Environmental Market Technology Infrastructure**
 - WREGIS is being deployed now and will be live in mid 2007. It handles California's renewable energy program.
 - Initial scope of WREGIS is renewable power generation, but should the State choose, it could be extended to handle all types of fixed emissions sources.
 - WREGIS is also a regional system that could easily be deployed to implement a regional GHG scheme.
 - The same technology used in WREGIS has additional modules that are being deployed in other parts of the country to track all types of emissions for certain states, to manage energy efficiency certificates, to manage all fuel types for generators, and to manage all sources of power generation within the state and from outside the state.

Our company commends all the Members for your efforts and devoted attention to this important work. We offer our strong support and assistance to the Committee, and would be happy to provide a demo of the systems used in U.S. REC markets to any or all of the MAC members. Over the last 7 years, APX has gained a substantial amount of experience in deploying and implementing market based environmental systems, and would welcome the opportunity to assist the Committee further. Please call us if you have any questions: 858-504-0333 for John Melby, or 617-699-0929 for Reiner Musier. Thank you.

Sincerely,

John M. Melby
Senior Vice President
APX, Inc.

Reiner Musier, Ph.D.
Chief Marketing Officer
APX, Inc.